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ENERGY CONSERVATION ACT (CHAPTER 92C)

ENERGY CONSERVATION (REGULATED GOODS AND REGISTERED SUPPLIERS) (AMENDMENT) REGULATIONS 2019

In exercise of the powers conferred by section 78 of the Energy Conservation Act, the Minister for the Environment and Water Resources makes the following Regulations:

Citation and commencement

1. These Regulations are the Energy Conservation (Regulated Goods and Registered Suppliers) (Amendment) Regulations 2019 and come into operation on 1 November 2019.

Amendment of regulation 2

2. Regulation 2 of the Energy Conservation (Regulated Goods and Registered Suppliers) Regulations 2017 (G.N. No. S 748/2017) (called in these Regulations the principal Regulations) is amended —

- (a) by inserting, immediately after the words “a lamp” in paragraph (c) of the definition of “energy efficiency”, the words “described in item 1, 2 or 3 of Part 1 of the Third Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017 (G.N. No. S 747/2017)”;
- (b) by inserting, immediately after paragraph (c) of the definition of “energy efficiency”, the following paragraph:

“(ca) in relation to a lamp described in item 4, 5 or 6 of Part 1 of the Third Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017, means the Lamp Efficacy as defined in the First Schedule;”;

(c) by deleting the word “and” at the end of paragraph (e) of the definition of “energy efficiency”;

(d) by inserting the word “and” at the end of paragraph (f) of the definition of “energy efficiency”, and by inserting immediately thereafter the following paragraph:

“(g) in relation to a ballast, means the Ballast Efficiency as defined in the First Schedule;”;

(e) by inserting, immediately after the definition of “Energy Label”, the following definition:

““non-high frequency ballast” has the same meaning as in Part 2 of the Seventh Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”;
and

(f) by inserting, immediately after the definition of “regulated air-conditioner”, the following definition:

““regulated ballast” means any ballast described in Part 1 of the Seventh Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”.

Amendment of regulation 3

3. Regulation 3 of the principal Regulations is amended by deleting the full-stop at the end of paragraph (f) and substituting a semi-colon, and by inserting immediately thereafter the following paragraph:

“(g) a regulated ballast —

(i) must be registered under regulation 4; and

(ii) if the regulated ballast is a non-high frequency ballast, must comply with the applicable energy efficiency standards under regulation 5.”.

Amendment of regulation 7

4. Regulation 7 of the principal Regulations is amended —
- (a) by inserting, immediately after paragraph (2), the following paragraph:
- “(3) Any person advertising any regulated goods subject to regulation 6 in an advertisement that has any visual element must ensure that —
- (a) an Energy Label is, as far as practicable, displayed in the advertisement next to the image or description of the regulated goods; or
- (b) where it is not practicable to comply with sub-paragraph (a), the tick rating for the regulated goods is prominently stated in the advertisement.”; and
- (b) by inserting, immediately after the word “affixed” in the regulation heading, the words “or displayed”.

Amendment of First Schedule

5. The First Schedule to the principal Regulations is amended —
- (a) by inserting, immediately after the definition of “Annual Energy Consumption” or “AEC” in paragraph 1, the following definition:
- ““Ballast Efficiency”, in relation to a ballast, means the ratio of P_{lamp} to P_{input} (the input power of the lamp-ballast circuit) with possible sensors, network connections and other auxiliary loads disconnected as specified in the test report, expressed in percentage;”;
- (b) by inserting, immediately after the definition of “compact fluorescent lamp with integrated ballast” or “CFLi” in paragraph 1, the following definition:
- ““compact fluorescent lamp without integrated ballast” or “CFLni” has the same meaning as in Part 2 of the Third Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”;

- (c) by inserting, immediately after the definition of “covered CFLi” in paragraph 1, the following definition:

““EEI Class B1”, in relation to a non-high frequency ballast, means the minimum Ballast Efficiency required for the ballast to be rated as Class B1 under Table 17 of Commission Regulation (EC) No. 245/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council;”;

- (d) by inserting, immediately after the definition of “ISO” in paragraph 1, the following definition:

““Lamp Efficacy” or “ η_{lamp} ” means the ratio of the rated luminous flux, expressed in lumens, ϕ , to the rated P_{lamp} , expressed in Watts;”;

- (e) by inserting, immediately after the definition of “LED lamp” in paragraph 1, the following definition:

““linear, double-capped fluorescent lamp without integrated ballast” or “LFL” has the same meaning as in Part 2 of the Third Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;”;

- (f) by deleting item 11 of paragraph 2 and substituting the following item:

“11. Incandescent lamp $P_{\text{lamp}} \leq 0.24\sqrt{\phi} + 0.0103\phi$ ”;

- (g) by inserting, immediately after the words “LED lamp” in the first column of item 14 of paragraph 2, the words “with an Edison screw or a bayonet lamp cap”;

- (h) by inserting, immediately after item 14 of paragraph 2, the following items:

“14A. CFLni (a) the ratio of luminous flux emitted by the lamp at 2,000 hours to its initial luminous flux is ≥ 0.80 ; and

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- 14B. LFL
- (b) the fraction of the total number of lamps that continue to operate (light output must be at least 50% of its initial luminous flux) at 2,000 hours is ≥ 0.9
 - (a) the ratio of luminous flux emitted by the lamp at 2,000 hours to its initial luminous flux is ≥ 0.80 ; and
 - (b) the fraction of the total number of lamps that continue to operate (light output must be at least 50% of its initial luminous flux) at 2,000 hours is ≥ 0.9
- 14C. LED lamp designed as a direct replacement for CFLni and LFL without requiring any internal modification of the luminaires
- (a) the ratio of luminous flux emitted by the lamp at 6,000 hours to its initial luminous flux is ≥ 0.80 ; and
 - (b) the fraction of the total number of lamps that continue to operate (light output must be at least 70% of its initial luminous flux) at 6,000 hours is ≥ 0.9 ”;

(i) by inserting, immediately after item 16 of paragraph 2, the following item:

“17. Non-high frequency Ballast Efficiency \geq EEI Class B1”;
ballast

(j) by deleting sub-paragraph (i) of paragraph 3 and substituting the following sub-paragraphs:

“(i) for incandescent lamps, CFLi, and LED lamps with an Edison screw or a bayonet lamp cap —

<i>Ticks</i>	<i>Lamp Power Consumption (P_{lamp}) in Watts</i>
2	$0.24\sqrt{\phi} + 0.0103\phi \geq P_{lamp} > 0.17 \times (0.88\sqrt{\phi} + 0.049\phi)$
3	$P_{lamp} \leq 0.17 \times (0.88\sqrt{\phi} + 0.049\phi)$

(j) for CFLni, LFL, and LED lamp designed as a direct replacement for CFLni and LFL without requiring any internal modification of the luminaires —

<i>Ticks</i>	<i>Rated Lamp Efficacy (η_{lamp}) in Lumen/Watts</i>
1	$\eta_{lamp} < 110$
2	$110 \leq \eta_{lamp} < 135$
3	$\eta_{lamp} \geq 135$ ”;

(k) by deleting sub-paragraphs (ii) and (iii) of paragraph 5(c) and substituting the following sub-paragraphs:

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| “(ii) CFLi | — IEC 60969 (2001) |
| (iii) LED lamp | — IEC 62612 (2013) |
| | The luminous flux measurement test must be conducted in accordance with CIE S 025 (2015) |
| (iv) CFLni | — IEC 60901 (2001) |
| (v) LFL | — IEC 60081 (2002) |
| (vi) LED lamp designed as a direct replacement for CFLni and LFL without requiring any internal modification of the luminaires | — IEC 62612 (2013) |
| | The luminous flux measurement test must be conducted in accordance with CIE S 025 (2015)”; and |

(l) by inserting, immediately after sub-paragraph (f) of paragraph 5, the following sub-paragraph:

“(g) Ballast All — IEC 62442-1 (2011) or
IEC 62442-1 (2018)”.

Amendment of Second Schedule

6. The Second Schedule to the principal Regulations is amended —

(a) by inserting, immediately after sub-paragraph (f) of paragraph 1, the following sub-paragraph:

“(g) ballast \$38”; and

(b) by inserting, immediately after sub-paragraph (f) of paragraph 2, the following sub-paragraph:

“(g) ballast \$20”.

Transitional provision

7. Despite regulation 5(f), item 11 of paragraph 2 of the First Schedule to the principal Regulations as in force immediately before 1 November 2019 continues to apply in relation to any supply, between 1 November 2019 and 31 October 2020 (both dates inclusive), of an incandescent lamp that is —

(a) imported into or manufactured in Singapore before 1 November 2019; or

(b) imported into or manufactured in Singapore on or after 1 November 2019 and supplied under an agreement entered into before 1 November 2019.

[G.N. No. S 603/2018]

Made on 31 October 2019.

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